

A PRELIMINARY EXAMINATION OF GENERAL MEDICAL ADMISSIONS TO BELFAST HOSPITALS IN 1973

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INTRODUCTION

THERE have been so many changes—political, social and technical which have altered the practice of general medicine in less than a professional lifetime that confusion and bewilderment affects many physicians. In Belfast the introduction of the Emergency Bed Service on 1st October 1969 combined with civil disturbances have intensified the problems of the general physician. Private and domiciliary practice have been decimated and personal contacts with general practitioners and colleagues have diminished. A responsibility to an impersonal system of community medicine rather than to patients referred by their family doctor seems to have arisen. It is appropriate to commence an examination of trends in general medicine in Belfast with a study of such figures as are available. An analysis of how the development of specialist subgroups, such as neurology, cardiology, rheumatology and geriatrics has affected it would require a much more detailed study. This preliminary study must determine where general medicine is being practised and what is the work load and its distribution. It is now possible to access the size of the emergency problem which is accepted by physicians on the Bed Service Rota where there is an unspecified clinical responsibility, an open commitment, and no rights to transfer. The statistics for general medicine in 1972–73 will be examined to ascertain the facts.

THE MEDICAL EMERGENCY SYSTEM IN BELFAST

The Input

The decision as to what constitutes an emergency is made by the general practitioner or in many instances at night by his locum, who is often a practitioner employed by a deputizing service. The factors which influence this decision are often largely social and only in part medical. The demand is infinite and increasing, while the pressures to pass on an insoluble problem become greater as society organization breaks down. Having made the decision on the data provided by the patient and his relatives, an assessment of the domestic support and sometimes the civil disturbances in the neighbourhood, and having made an examination or accepted the evidence of hearsay, the practitioner contacts the Emergency Bed Service (E.B.S.). The E.B.S. then has to find a bed and places the primary responsibility for providing it on the general medical unit on “take in” for the 24 hour period. If full, a back up hospital (Mater Hospital (M.H.) or Ulster Hospital (U.H.)) may be utilised, but if the system is overloaded the “take in” unit is again faced with making a bed available somewhere. This is accomplished by boarding out

patients in surrounding units, with not unreasonable complaints by the specialities thus involved. The input to a "take in medical unit" is, therefore, unspecified.

The Duration of Stay

A space of 6 days elapses before the same unit is again on "take in". Theoretically sufficient beds have been made available to deal with the expected input, which means approximately half the beds should be vacant in most units, with a service time or duration of stay of 14 days for each patient and 100 per cent bed occupancy.

The Output

Unfortunately, this is where the bottleneck seems to occur. Social long stay and geriatric problems have to be maintained in the unit as well as psychiatric patients. All these services claim an overload and the right of selection. There is no authority to pass on the responsibility of care for a patient who has received adequate medical treatment and investigation for his acute illness. Geriatric units work on a geographical basis of districts. They are not responsible for patients admitted to their own hospital group who may have come from another district except to make a geriatric assessment. Contact with geriatricians outside the district of the hospital concerned is on the whole unsatisfactory.

TABLE I		
<i>General Medical Accommodation in the City of Belfast 1973 (E.B.S.)</i>		
<i>Hospital</i>	<i>Beds</i>	<i>Take-in Medical Units</i>
Emergency Bed Service Rota:		
Royal Victoria (R.V.H.)	134	3
Belfast City (B.C.H.)	132	3
Musgrave Park (M.P.H.)	58	1
	324	7
Back Up Hospitals:		
Mater Infirmorum (M.H.)	66	
Ulster (U.H.)	48	
	114	
Total General Medical Beds	438	

Figures obtained from Emergency Bed Service

THE RESOURCES

The hospitals in the City of Belfast with their complement of general medical beds are shown in Table I. It will be seen they fall into 2 groups:

1. Hospitals on the Emergency Bed Rota which include the 2 major complexes

of the Royal Victoria Hospital (R.V.H.) and the Belfast City Hospital (B.C.H.). These, together with Musgrave Park Hospital (M.P.H.) provide 7 medical units each covering a take in for 24 hours every week and provide 324 beds.

2. Back up hospitals which do accept emergencies but are not under a specific responsibility in this respect are able to operate with greater selectivity. They provide 114 beds.

THE RESPONSIBILITY

Table II shows the population served by the hospitals. It will be noted there is a difference of 118,685 between the census figure and the population supplied by the

TABLE II <i>Population Statistics</i>	
City of Belfast (Census 1971)	362,400
New Health and Social Services Districts on 1st October 1973 (Department of Finance)	
North and West Belfast	228,511
South Belfast	105,754
East Belfast and Castlereagh	146,820
	481,085

newly defined Health and Social Services Districts for Belfast and Castlereagh. A difference which is only partially explained by the inclusion of Castlereagh Rural District with an estimated population of 64,406. An official explanation was not forthcoming but it was suggested that population transfers of major proportions could be a factor. It seems likely that the population of 481,085 is a more accurate assessment of the demand. To serve this population there are 0.91 general medical beds per 1,000.

THE WORKLOAD AND ITS DISTRIBUTION

Table III shows the workload for 1973. Column 1 gives the total medical patients admitted to the hospital and includes both the medical units and observation unit. Column 2 gives the patients admitted to the care of medical units only and includes transfers from the observation unit. The difference may also include medical patients boarded out in surgical and other units during peak periods. The exact figures for these would be difficult to obtain under the present accounting methods. Column 3 shows the "Medical Emergencies" admitted via casualty on request of the E.B.S.

In Table IV these gross figures have been analysed as percentages for the purpose of comparison. As could be predicted from the system, the following facts emerge: –

TABLE III			
<i>General Medical Admissions and Their Distribution for the Year 1973 (E.B.S.)</i>			
<i>Hospital</i>	<i>Column 1 Total Admissions</i>	<i>Column 2 Total Admissions to Wards</i>	<i>Column 3 Medical Emergencies</i>
R.V.H.	3,930	3,421	3,197
B.C.H.	4,882	3,739	4,407
M.P.H.	944	944	767
M.H.	1,450	1,450	424
U.H.	1,480	1,480	337
	12,686	11,034	9,132

Figures from weekly statistics of Emergency Bed Service Cols. I, IA & 4

TABLE IV			
<i>Analysis of Medical Emergency Admissions during the Year 1973</i>			
<i>Hospital</i>	<i>Distribution of emergency load Percentage</i>	<i>Ratio emergency/Total in each hospital Percentage</i>	<i>Proportion</i>
R.V.H.	35.03	81.34	10 out of 12
B.C.H.	48.25	90.27	10 out of 11
M.P.H.	8.39 91.67%	81.25	10 out of 12
M.H.	4.64	29.24	10 out of 34
U.H.	3.69 8.33%	22.97	10 out of 41

1. The "medical emergencies" were overwhelmingly the responsibility of the hospitals on the E.B.S. rota which dealt with 91.67 per cent of them. These consist of the two major teaching complexes and 3 out of the 7 units are professorial.
2. The problem of dealing with the "medical emergencies" completely dominated the work of the medical units in these hospitals so that 10 out of 11 or 12 admissions were "emergencies". Each medical unit has to gear its whole activity to coping with a weekly input of unpredictable proportions at this level. To this end other responsibilities and commitments have of necessity been pruned by most of the consultants concerned. The input at times overwhelms the resources.
3. The back up hospitals show a very different pattern being able to cut their involvement in "medical emergencies" to a third or a quarter of the admissions to their general medical units. It may be reasonably concluded that the more traditional methods of consultant medical practice still apply. The physician accepts personal responsibility for the care of patients he has seen at the request of a general practitioner he knows. He is able to fill his beds on his own criteria of need for his skills. He can continue to see domiciliary and private patients knowing he is able to use facilities for treatment and investi-

gation. His out-patients decisions are backed up by the knowledge he can admit patients for investigation without anxiety as to the bed state.

THE EMERGENCY BED ROTA AS A GERIATRIC ADMISSIONS AND DISPOSAL UNIT

Criticisms have been made by casualty consultants as well as physicians that the Emergency Bed Rota Units are being used for social and geriatric patients. An examination of such allegations would be complex but has been commenced. It would require analysis of the intake of patients and a critical determination of how much of the demand was for social reasons and how much of their medical need could be met by the provision of less costly accommodation than wards in a general hospital. Table V does, however, demonstrate that half the intake to the

TABLE V
Comparison of Age Statistics in General Medical Wards—B.C.H. & R.V.H.

		<i>Under 40</i>	<i>41-65</i>	<i>65 + years</i>
B.C.H. (1972)	2791 patients	13%	37%	51%
R.V.H. (1973)	1044 patients	12%	39%	49%

R.V.H. data from "Report of Working Party on the R.V.H." Page 7 which analysed the admissions to General Medical Units 1st January—1st April 1973.

B.C.H. figures extracted from Hospital Activity Analysis of patients in General Medical Wards during the whole of 1972.

major hospital medical beds are senior citizens over 65 years. The objectives of the general physician have not been clearly spelled out and it seems probable that financial stringencies may soon require a drastic reappraisal of the roles of the general physicians, the geriatricians, the general practitioners and the welfare authorities.

SUMMARY AND CONCLUSIONS

The workload of general medicine and its distribution among the Belfast hospitals has been analysed for the year 1972. To deal with these patients, beds are supplied at an apparently reasonable rate of 0.91 per 1,000 population. The influence of the Emergency Bed Service (E.B.S.) upon the practice of hospital medicine is predominant—out of a total 12,686 admissions 9,132 were "medical emergencies". The hospitals on the emergency rota had to accept 91.67 per cent of this load into 324 beds while the remaining hospitals only accepted 8.33 per cent into 114 beds. "Medical emergencies" are designated by the outside practitioners. The E.B.S. undertakes to arrange their admissions and the medical unit on duty in the emergency rota is made ultimately responsible for providing a bed. This label provides at present the only unrestricted access to hospitals and 50 per cent of such patients are senior citizens. "Medical emergencies" may be largely social, geriatric or even psychiatric problems as there are long waiting lists for these services. Their admission is unrestricted and their disposal from medical units is difficult.

Two types of hospital practice may be identified: –

1. The seven medical units on the E.B.S. rota have already all their patients admitted as “medical emergencies”. These units are in the major hospital complexes with a heavy teaching programme and include three professorial units. Their work is dominated by the burden of accepting and disposing of “medical emergencies”.
2. The back up hospitals which have approximately a quarter of the available beds have only a third or a quarter of their patients admitted as medical emergencies. It must be presumed that the majority of their patients are selected either by arrangement, by consultation or after a domiciliary visit. They would appear to practice more traditional medicine.

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BOOK REVIEWS

DIVERTICULAR DISEASES (CLINICS IN GASTROENTEROLOGY Vol. 4, No. 1). Edited by A. N. Smith (Pp. 224. Illustrated. £6.00). London: Saunders. 1975.

THIS latest volume in the 'Clinics' series is devoted to papers on diverticular disease edited by Adam Smith, and with contributions from both sides of the Atlantic and both sides of the Irish Sea. Many aspects of this disease have been studied in the last two decades and these have thrown new light on the aetiology of this curious disorder of colonic function. There seems little doubt that dietary variation is correlated with the prevalence of the condition and that a high residue diet seems to protect against the development of the basic disorder. Denis Burkitt makes a cogent case for this theory with the touch of an evangelist, who regards a low residue diet as leading to the gates of vesico-colic fistula, if not quite to Hell itself. The precise mechanisms by which these changes are brought about are explored in papers by Alastair Connell, George Parks and Basil Morson and, in the last paper, John Hodgson attempts to convince us that animal models are appropriate for further research; not all of us will be convinced.

There is not as much that is new in the papers dealing with clinical management which has changed very little except in the assimilation of the fact that a high residue diet lowers colonic pressures, and we remember how, in the past, low residue diets were prescribed without any logical basis. These papers give a sound account of both medical and surgical management with a paper by Michael Reilly and Adam Smith discussing the place of sigmoid-myotomy in the management of early disease. This remains controversial and most clinicians suspect that the case that will respond to myotomy could be equally well managed by dietary measures and that if operation is really indicated resection is required. The case is also well made that resection before major complications arise should be considered.

This is an excellent book, well balanced and informative, bringing us up-to-date in this common disease which requires care and judgment in its management. The editor, the contributors and the publishers are to be congratulated.

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